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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/825,451

Filing Date: April 02, 2001

Appellant(s): CHAMPERNOWNE, ARTHUR FRANCIS

Tracy S. Powell For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed May 18, 2005.

W

#### (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of the claimed subject matter contained in the brief is deficient because the summary of the invention is a concise explanation of the subject matter defined in each of the independent claim involved in the appeal. Appellant states in the first paragraph of under the Summary of Claimed Subject Matter that the "following background and the discussions of the disclosed embodiments of Appellant's invention are not provided to define the scope or interpretation of the appealed claims". Appellant has included a section "A" titled Summary of the Exemplary Subject Matter. This is not a concise explanation of the subject matter defined in each of the independent claims involved in the appeal. In fact, much of Section A discusses features that are not recited in the rejected claims. For example, the appellant discusses breakpoint information. This feature is not recited in the rejected claims. The appellant also argues the purported merits or speculative applications of the invention and distinguishes the invention from the prior art. The Examiner request that section "A" not be considered and only section "B" be considered.

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Section "B" is an appropriate explanation of the subject matter defined in each

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independent claim. However, where the appellant refers to the specification by page

and line number, many of the citations are incorrect. Many of the pages that the

appellant refers to are not in the specification. For example, the appellant refers to

page 28, page 29, and page 30 of the specification. The specification only has 27

pages. Secondly, most of the pages that the appellant refers to do not contain the

subject matter that appellant is referencing.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

No statement. Not required.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6295521

DeMarcken et al.

9-2001

WO01/29693

Sabre, Inc.

4-2001

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#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the appellant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the appellant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3, 9, 10, 13, 15, 21,22, 25, 27, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by DeMarcken et al. (US Patent No. 6,295,521) (hereinafter referred to a DeMarcken).

# Referring to Claims 1, 13, and 25:

DeMarcken discloses a method, medium and system for finding at least one best fare for a trip, comprising:

At the query server computer, in response to a fare query received from the client application (col. 1, lines 48-56, col. 3, line 55 thru col. 4, line 41, Figs. 2-3, 18, 19) determining a set of partial fare solutions for the trip (Figs 1-18, col. 51 – Finding the Best Price, see line 26-29 – (partial) pricing solutions, col. 55, lines 51-56);

adding trip information to the partial fare solutions in order to define a set of complete fare solutions for the trip (Figs.19-27, col. 4, lines 43-51, col. 5, lines 1-4, see also, col. 49, lines 30-44, col. 51, lines 35-55, Fig. 3);

as trip information is added to the partial fare solutions, eliminating partial fare solutions that are non-optimal partial solutions (col. 5, lines 4-6- see also, col. 49, line 30 thru col. 50, line 39, Fig. 19, col. 2, lines 27-37, col. 53, line 25 thru col. 54, line 34, col. 55, lines 48-62); and

returning a subset of said complete fare solutions as the best fares for the trip (Fig. 19, col. 1, line 46 thru col. 2, line 51, col. 49, lines 30-59, col. 51- Finding the Best Pricing Solution, col. 55 47-62).

#### Referring to Claims 3, 15, and 27:

DeMarcken discloses the method and system of claims 1, 13 and 25, wherein said subset of complete fare solutions is a predetermined number of lowest cost fare solutions (col. 2, lines 31-37, col. 4, lines 30-41, col. 6, lines 16-19, see also col. 28, line 60 thru col. 29, line 3, col. 29, lines 63-67- deferred rules, Fig. 4B, Fig. 19, it can be inferred that a subset can have a predetermined number of lowest cost fare solutions, col. 49, lines 30-59, col. 51, lines 3-55, col. 52- Finding Minimum Value).

#### Referring to Claims 9, 10, 21, 22, 33, and 34:

DeMarcken discloses the method and system of claims 1, 13 and 25 wherein said partial fare solutions are stored in a priority queue, said complete fare solutions are retrieved from a priority queue (cols. 55-61–Enumerating Pricing Solutions).

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# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

# 2. Claims 2, 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken.

#### Referring to Claim 2, 14, and 26:

DeMarcken discloses the method, medium and system of claims I, 13, and 25, wherein adding trip information comprises:

supplying a fare query to a root node in a solution tree (col. 1, lines 46-65, col. 7, lines 16-18, Figs. 2 (48), 3, 3A, 3B, see also, col. 5, lines 36-45);

assigning fare components corresponding to said root node to a plurality of nodes (Figs. 2 - faring process (18), 3, 3A, 3B, , col. 1, line 46-65, col. 2, lines 38-51, col. 15, lines 55-66 Fig. 3A);

assigning at least one carrier corresponding to said nodes to a plurality of nodes (Fig. 3A (UA (United Airline, NW (North West), Fig. 6, (114);

assigning at least one flight corresponding to said nodes to a plurality of nodes (Fig. 3, US Bos –LAX Rt QE7NR, Bos-San UAA515), Fig. 2, scheduler processor (16), col. 3, lines 55-66, see also, col. 14, lines 1-6);

assigning at least one priceable unit corresponding to said nodes to a

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plurality of nodes (pricing solution, col. 3, lines 55-66); and assigning at least one fare corresponding to said nodes to a plurality of leaf nodes (Fig.3A, 3B, Fig. 4A (fares or each faring atom, Col. 10 – The Faring System- Fig. 19).

DeMarcken does not disclose assigning the fare components to a plurality of first nodes, at least one carrier to a plurality of second nodes, at least one flight corresponding to a plurality of third nodes, assigning at least one pricable unit to a plurality of fourth nodes, and assigning at least one fare corresponding to a plurality of leaf nodes.

However, Demarcken discloses a data structure comprising a plurality of nodes that can be logically manipulated using value functions and a graph that contains nodes that can be logically manipulated or combined to extract a plurality of pricing solutions. (col. 2, lines 38-51). It would have been obvious to ordinary skill in the art to arrange DeMarcken's method and system to include the assignment of nodes as set forth in Claim 2, 14, 26 since DeMarcken 's system and method discloses a data structure comprising a plurality of nodes which can be logically manipulated or combined and this would include assigning the nodes as set forth Claims 2, 14, and 26.

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3. Claims 4-8, 11,12, 16-20, 23,24, 28-32, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken as applied to claims 1, 13 and 25 above, and further in view of Sabre, Inc. (PCT WO 01/29693), (hereinafter referred to as Sabre).

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#### Referring to Claims 4, 16 and 28:

Demarcken discloses the method, medium and system of claims 1, 13 and 25. DeMarcken does not disclose wherein said subset of complete fare solutions is an exhaustive set of said complete fare solutions.

However, Sabre discloses a method and system wherein the subset of complete fare solutions is an exhaustive set of complete far solutions (page 2, lines 18-19, page 3, lines 1-2, page 4, lines 17-22).

It would have been obvious to one of ordinary skill in the art to incorporate into the method and system of DeMarcken the teachings of Sabre so as to provide the lowest fare across a wide range of airlines and itineraries (page 3, lines 1-2).

#### Referring to Claims 5, 17, and 29:

Sabre further discloses the method, medium and system of claims 1, 13 and 25. wherein adding trip information and eliminating partial fare solutions are performed in a recursive manner (page 9, lines 13-14, page 10, lines 2-4).

#### Referring to Claims 6, 18, and 30:

Sabre further discloses the method, medium and systems of claims 1, 13, and 25, wherein adding trip information and eliminating partial fare solutions are performed in an iterative manner (page 9, lines 18-22).

# Referring to Claims 7, 19, and 31:

Sabre further discloses the method, medium and systems of claims 1, 13, and 25, wherein said partial fare solutions are eliminated based on a threshold cost (page 4, lines 17-23, page 9, lines 6-17, page 11, lines 16-18).

#### Referring to Claims 8, 20, and 32:

Sabre further discloses the method, medium and system of claims 1, 13, and 25, wherein said partial fare solutions are eliminated based on a refined lower bound (page 9, line 6 thru page 12, line 11).

#### Referring to Claims 11, 23, and 35:

Sabre further discloses the method, medium and system of claims 1, 13 and 25 wherein adding trip information and eliminating partial fare solutions are performed as part of a branch-and-bound best fare search routine (page 10, lines 4-10).

#### Referring to Claims 12, 24, and 26:

Sabre further discloses the method, medium and system of claims 1, 13, and 25, wherein adding trip information and eliminating partial fare solutions are performed both backward and forward from a destination and origin (page 3, lines 13-18).

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# (11) Response to Argument

- B. Arguments for Appeal
- 1. Rejection of Claims 1,3, 9,10, 13, 15, 21, 22, 25, 27, 33, and 34 under 35 USC Section 102(e).
  - a) Claims 1, 13, and 25:
  - 1. DeMarcken et al fail to teach teaches determining a set of partial fare solutions.

Contrary to appellant's assertion, DeMarcken discloses determining a set of partial fare solutions.

DeMarcken discloses partial fare solutions as a set of *partial pricing solutions* represented by the node. Under the heading *Finding the Best Pricing Solution*,

DeMarcken discloses that the inner value of a node is the best possible value of the function F on the set of *(partial) pricing-solutions* represented by the node. If the node is an AND, representing a combination, then the minimum value of F over the *partial solutions* it represents is the sum of the minimum value of F over the *partial solutions* represented by each of its children. If a node is an OR, representing a choice, then the minimum value of F over the *partial solutions* it represents is found by making the optimal choice of children (column 51, lines 3-55).

DeMarcken further discloses in the computation of inner values, the first step in all of the above algorithms is modified to mark for every node whether the node

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represents any valid *partial pricing solutions* given a specific query parameter (column 54, lines 25-28).

The enumeration algorithm 312c maintains a queue of *partial solutions* ordered by the lowest possible value (e.g. price 312c) of the value function over all complete solutions that contain the partial solutions. At the start of the search, a single *partial solution* is constructed from the root node of the pricing graph 38'. At each step the *best partial solution* is dequeued and expanded (column 55 line 48 thru col. 56, line 64). Appellant is also directed to Figure 3A.

The appellant argues that DeMarcken's are not a set of partial fare solutions to which trip information is ultimately added. In response to this argument, the Examiner directs the appellant to column 54, lines 25-28 wherein DeMarcken discloses that in the computation of inner values, the first step in all of the above algorithms is modified to mark for every node whether the node *represents any valid partial pricing solutions given a specific query parameter.* 

Appellant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Appellant's arguments do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. The appellant repeatedly recites excerpts from DeMarcken's disclosure. These excerpts do not address the claim language.

2. DeMarcken et al fail to teach adding trip information to partial fare solutions.

Demarcken discloses a pruning process *responsive to user preferences* that alters the directed acyclic graph representation in such a manner so as to eliminate undesirable pricing solutions and an enumeration process *responsive to user preferences* that produce s a sorted subset of the pricing solutions represented in the directed acyclic graph (column 2, lines 31-37).

DeMarcken discloses the process 301 to include a *user query 302 that passes* parameters into a process 304 and a value function 306 to extract from the pricing graph 38 certain pricing solutions 308 that satisfy parameters specified by the user query. DeMarcken discloses the pricing solution list 308 will contain pricing solutions extracted from the pricing graph 38 in accordance with user specified parameters from the user query 302 using one of the processes 304 and one of the value functions 306 (column 49, lines 29-44). In response to user query 310, one of the processes is executed and the processes 312 can comprise a find best "value" and pricing solutions associated with the value (price) process 312a; find best "value" and pricing solutions associated with the value for "node" (e.g. find best price for a particular itinerary) process 312b (column 49, lines 45-59).

DeMarcken further discloses in the computation of inner values, the first step in all of the above algorithms, is modified to mark for every node whether the node represents any valid partial pricing solutions given a specific query parameter (column 54, lines 25-28).

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Contrary to the appellant's assertion that DeMarken's partial fares refer to temporary place holders, appellant cites column 55, lines 54-56, the Examiner disagrees and directs the Board to this section wherein DeMarcken states that at the start of a search, a single partial solution is constructed from the root node of the pricing graph. At each step the best partial solution is dequeued and expanded (col. 55, lines 54-56).

3. DeMarcken et al fail to teach eliminating partial fare solutions that are non-optimal as trip information is added.

DeMarcken discloses a pruning process responsive to user preferences that alters the directed acyclic graph representation in such a manner so as to *eliminate undesirable pricing solutions* and an enumeration process responsive to user preferences that produce s a sorted subset of the pricing solutions represented in the directed acyclic graph (column 2, lines 31-37).

DeMarcken further discloses the process 301 to include a user query 302 that passes parameters into a process 304 and a value function 306 to extract from the pricing graph 38 certain pricing solutions 308 that satisfy parameters specified by the user query. DeMarcken discloses the pricing solution list 308 will contain pricing solutions extracted from the pricing graph 38 in accordance with user specified parameters from the user query 302 using one of the processes 304 and one of the value functions 306 (column 49, lines 29-44). In response to user query 310, one of the processes is executed and the processes 312 can comprise a find best

"value" and pricing solutions associated with the value (price) process 312a; find best "value" and pricing solutions associated with the value for "node" (e.g. find best price for a particular itinerary) process 312b (column 49, lines 45-59).

The Best Price algorithm 312a efficiently finds the cheapest (best) price by starting at the "bottom" of pricing graph 38' and constructing the best solution for each nod by looking at the best solution of its children. At the end of the process the root node contains the best pricing solution for the entire pricing graph 38 (col. 51, lines 13-19.

If a node is an OR, representing a choice of children, then the minimum value of F over the *partial solutions it represents is found by making the optimal choice* of *children* (column 51, lines 40-45). The procedure *find-optimal-solution* takes in a root-node and a nod-value functions calls sort-nodes and compute-inner-values to calculate inner values for all nodes in the pricing-graph, and constructs a pricing-solution (column 51, lines 51-55).

Therefore, by choosing the optimal choice that satisfy the user's parameters,

DeMarcken is eliminating the partial fare solutions that are non-optimal.

#### b). Claims 3, 15, 27

DeMarcken discloses wherein the subset of complete fare solutions is a predetermined number of lowest cost fare solutions

DeMarcken discloses a pruning process responsive to user preferences that alters the directed acyclic graph representation in such a manner so as to eliminate

undesirable pricing solutions and an enumeration process responsive to user preferences that produces a sorted *subset* of the pricing solutions represented in the directed acyclic graph (column 2, lines 31-37).

Under control of the client process 36, the requesting client 30c can store and/or logically manipulate the set of pricing solutions 38 to extract or display a *subset* of the set of pricing solutions as a display representation 41 on the monitor 40 (column 4, lines 37-41).

Appellant's argues that DeMarcken does not disclose a subset of complete fare solutions returned to the consumer being a predetermined number of lowest cost fare solutions. However, the appellant states in the preamble of the invention that the appellant's invention is for finding at least one best fare for a trip. Therefore, a predetermined number could be one best fare.

#### c). Claim 9-10, 21-22, and 33-34

Appellant's arguments in the first paragraph on page 21 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

2. Rejections of Claims 2, 4-8, 11, 12, 14, 16-20, 23, 24, 26, 28-32, 35, and 36 under 35 USC Section 103 (a)

#### a). Claims 2, 14, and 26

DeMarcken discloses adding trip information comprising, supplying a fare query to a root node in a solution tree.

DeMarcken disclose a system includes a scheduler that produces a set of flights in response to the user specified query, a faring system that provides fares for the sets of flights, and the system represents the set of flights and fares as a set of logically manipulatable nodes in a data structure. The system includes an enumeration process that processes the data structure to extract flight-fare components from nodes in the data structure (column 1, lines 46-65; column 7, lines 16-18, Figs. 2 (48) User Input Query (16) Scheduler Process 18 Faring Process, 3 (70) Enumerate Pricing Solutions from DAG (72) Display Travel Based on User Input (76) User Query, 3A (Tree), 3B (Tree), see also, col. 5, lines 36-45 set of pricing solutions 38 is as a data structure comprising a plurality of nodes including itineraries and fares);

DeMarcken discloses assigning fare components corresponding to said root node to a plurality of nodes.

The system includes a scheduler that produces a set of flights in response to the user specified query, a faring system that provides fares for the sets of flights, and the system represents the set of flights and fares as a set of logically manipulatable nodes

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in a data structure (Figure 2 - faring process (18), Figures 3, 3A, 3B, column 1, line 46-65, column 2, lines 38-51, column 15, lines 55-66).

DeMarcken discloses assigning at least one carrier corresponding to said nodes to a plurality of nodes (Figure 3A (UA (United Airline, NW (North West), Figure 6, (114);

DeMarcken discloses assigning at least one flight corresponding to said nodes to a plurality of nodes (Figure 3, US Bos –LAX Rt QE7NR, Bos-San UAA515), Figure 2, scheduler processor (16), column 3, lines 55-66, column 14, lines 1-6).

DeMarcken discloses assigning at least one priceable unit corresponding to said nodes to a plurality of nodes (pricing solution, column 3, lines 55-66).

DeMarcken discloses assigning at least one fare corresponding to said nodes to a plurality of leaf nodes (Figures3A, 3B, Figure 4A (fares or each faring atom), column 10 – The Faring System- Figure 19).

DeMarcken does not disclose assigning the fare components to a plurality of first nodes, assigning the carrier to a plurality of second nodes, assigning the flight to a plurality of third nodes, assigning a pricable unit to a plurality of fourth nodes, or assigning a fare to a plurality of leaf nodes.

However, DeMarcken discloses a data structure comprising a plurality of nodes that can be logically manipulated using value functions and a graph that contains nodes that can be logically manipulated or combined to extract a plurality of pricing solutions. (column 2, lines 38-51).

It is the Examiner's position that it would have been obvious to ordinary skill in the art to arrange DeMarcken's method and system to include the assignment of nodes

as set forth in Claim 2, 14, 26 since DeMarcken 's system and method discloses a data structure comprising a plurality of nodes which can be logically manipulated or combined.

The appellant further argues that DeMarcken discloses a subtractive process rather than an additive process. However, both the appellant and DeMarcken disclose an additive process by using subtraction. Both build an optimal fare solution by passing user query parameters into a process and eliminating undesirable pricing solutions.

# b). Claims 4-8, 11-12, 16-20, 23-24, 28-32 and 35-36

Appellant's arguments in the first three paragraphs under section "b" on page 23 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

#### 1. Claims 4, 16, and 28

The appellant argues that Sabre does not disclose a subset of complete fare solutions being an exhaustive set of complete fare solutions.

The Examiner submits that Sabre does disclose a subset of complete fare solutions that are an exhaustive set of complete fare solutions.

Sabre discloses that the processor receives an itinerary including an origin and destination, constructs a virtual network representing one or more paths between the

origin and destiniation, traverses the one or more paths in search of a lowest cost path, applies constraints to each traversed path, and designates a traversed path between the origin and destination as the lowest cost path (page 3, lines 13-18). Sabre also discloses that the search technique provides efficient searches by using a combination of lower and upper bounds on fares and fare combinations, thus enabling it to implicitly enumerate the search space. In this manner a large number of possibilities can be considered without generating them all explicitly (page 4, lines 17-22). This implies an exhaustive search.

#### 2. Claims 5, 17, and 29

Appellant argues that Sabre does not teach or disclose adding trip information and eliminating partial fare solution in a recursive manner.

Sabre discloses the lower bounds can be determined dynamically using backwards *recursion* on arc bounds (page 9, lines 13-14).

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Sabre discloses using backward recursion. Sabre was combined with DeMarcken. DeMarcken discloses adding trip information and eliminating partial fare

solutions. 35 USC 103(a) is used for a rejection when there is no single reference that suggests or discloses all the elements claimed.

## 3. Claims 6, 18, and 30:

The appellant argues that Sabre does not discloses adding trip information and eliminating partial fare solutions being performed in an iterative manner.

Sabre discloses the search is sequential with the best path extended with each *iteration* (page 9, lines 18-22).

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Sabre discloses *iteration*. Sabre was combined with DeMarcken. DeMarcken discloses adding trip information and eliminating partial fare solutions. 35 USC 103(a) is used for a rejection when there is no single reference that suggests or discloses all the elements claimed.

Furthermore, DeMarcken discloses *iterating* the partial pricing solutions (col. 51, lines 20-25)

# 4. Claims 7, 19, and 31:

Appellant argues that Sabre does not disclose the partial fare solutions being eliminated based on a threshold cost.

Sabre discloses a check made to see whether or not all the bounds exceed a customer's target price (e.g. customer's designated maximum price). The target price is an upper bound on the search (page 9, lines 6-17) and that the target eliminating based on

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Sabre discloses target price (threshold). Sabre was combined with DeMarcken.

DeMarcken discloses adding trip information and eliminating partial fare solutions.

#### 5. Claims 8, 20, and 32:

Appellant argues that Sabre does not discloses the partial fare solutions being eliminated based on a refined lower bound.

Sabre discloses lower bounds (page 9, line 6 thru page 12, line 11).

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Sabre discloses lower bounds. Sabre was combined with DeMarcken.

DeMarcken discloses adding trip information and eliminating partial fare solutions.

# Claims 11-12, 23-24, and 35-36:

Appellant has failed to address these claims in the arguments.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

SUPERVISORY PATENT EXAMINER

**TECHNOLOGY CENTER 3600** 

Jan Mooneyham July 25, 2005

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